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AUTHOR Adams, Kay A.
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ABSTRACT

Some of the methodological problems in analyzing and reporting qualitative data are addressed, and some solutions based on recent experiences in conducting several qualitative studies are proposed. The following are some guidelines for implementing an intuitive approach to analyzing and reporting qualitative data: (1) use a team of evaluators; (2) focus the evaluation around critical issues which emerge on site; (3) test preliminary findings; (4) begin analysis on site; (5) give an oral debriefing to key respondents at the end of the visit; (6) strategically use direct quotes; (7) use triangulation and multimethod approaches; (8) report qualitative findings thoroughly; and (9) work with decision makers to accept qualitative findings. In a sense, wrongness may be easier to control in a qualitative study than a quantitative study since the evaluator has fuller information about the condition under which data have been collected. (RL)

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The Keen Edged Feather: Intuitive Analysis and Reporting of Qualitative Evaluation Data*

Kay A. Adams
The Ohio State University

Qualitative methods are disarmingly attractive. In-depth interviews and personal observation produce a wealth of insights into the nuances of a situation. The sensitivity of qualitative methods make it possible to understand subtle program effects that would not show up in a more quantitative approach. The richness of the information collected allows the evaluator to unearth meaningful insights at many levels -- the student, the teacher, the administrator, and the policy maker. The reciprocal stimulation involved in implementing qualitative techniques leaves both subjects and evaluator feeling rewarded.

However, in a recent article by Matthew Miles he calls qualitative data "an attractive nuisance." His article eloquently pronounces some of the perils of qualitative research:

> "Qualitative data tend to overload the researcher badly at almost every point: the sheer range of phenomena to be observed, the recorded volume of notes, the time required for write-up, coding, and analysis can all become overwhelming. But the most serious and central difficulty in the use of qualitative data is that methods of analysis are not well formulated. For quantitative data, there are clear conventions the researcher can use. But the analyst faced with a bank of qualitative data has very few guidelines for protection against self-delusion, let alone the presentation of "unreliable" or "invalid" conclusions to scientific or policy making audiences. How can we be sure that an "earthy," "undeniable," "serendipitous" finding is not, in fact, wrong?" (Miles, 1979)

Miles' points are well taken. Qualitative studies can be extraordinarily troublesome, especially the end phases of analysis and reporting of the information produced. There are probably as many difficulties in handling quantitative data but more conventions, decision rules, techniques, and procedures have been developed for analysis.

The attractive features of qualitative data are emphemeral unless we can also reckon with the nuisances. This paper addresses some of the methodological problems in analyzing and reporting qualitative data and proposes some solutions based on my recent experiences in conducting several qualitative studies. These

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Data interpretation is viewed as biased and lacking credibility. Qualitative approaches may be viewed as yielding a subjective, and therefore, biased portrayal of a situation. Decision makers may view qualitative data as lacking credibility.

Guidelines

So how does the evaluator begin to get a handle on this wild beast? Some evaluators have turned to structured, more quantitative ways of handling the data. I have not. Although there is some relief in using a coding scheme to reduce the information into bits that can be analyzed systematically (Spirer 1980), I find these procedures to be overly cumbersome and expensive. I have turned to intuitive analysis. This is an analysis procedure which begins on site and is foremost in my mind from the first interview onward. The following are some guidelines for implementing an intuitive approach to analyzing and reporting qualitative data.

Use a team of evaluators. If qualitative data is to be analyzed intuitively, I highly recommend using a team approach. I prefer a team of three because the group dynamics facilitate stimulating discussion and balanced participation without requiring a lot of time. In a qualitative approach, the evaluators become the instrument. Human instruments have the advantage of tremendous flexibility that allows data to be collected through different senses simultaneously. Human instruments also have the advantage of quick processing and categorizing of information so that subsequent probes reflect previous responses. I find properly trained human instruments are far superior mechanisms for collecting and analyzing data than paper and machines. The main problem with human instruments is they carry preconceived ideas that influence the way information is received and categorized. This problem is minimized by using a team approach. Team members provide a valuable validity check. By watching each others perceptions for bias, a team helps avoid premature closure on half-formed issues and wrong interpretations.

Focus the evaluation around critical issues which emerge on site. During each day on site, potentially meaningful issues begin to emerge. I watch for these and make marginal notes to myself about them. At the end of the first day of interviews and observation, I meet with the other members of the team for an "issue analysis seminar." Similar seminars should be held at the end of each day. For a short site visit, one seminar may be sufficient. Issue analysis seminars are held after team members have individually reviewed their notes to fill in gaps and pick out major issues. Team members are encouraged to argue, reconfigure, and reject issues based on their individual experiences and perceptions. The structure of a seminar can vary but there are three types of probing questions that are typically addressed:

1. What are the major effects? What stands out as the biggest accomplishment (e.g., helped the teacher education programs survive in a period of retrenchment)?

2. What major problems are they experiencing? What are the fundamental weaknesses in the ideas and structure of the program (e.g., many project objectives have not been implemented. What should be the primary focus on program activities in the nine months remaining?)?

3. What kinds of advice would we offer at this point? What's our impression of needed changes (e.g., deepen the focus of the program to emphasize more intense feelings)?

These three questions provide a framework for articulating the basic ingredients of most evaluations: strengths, weaknesses, and recommendations. At first, these sessions should be freewheeling. Team members should be encouraged to share gut level impressions and hunches. As the site visit progresses, team members should become more demanding of ne another and require clarification of hunches with specific references from notes.

Test preliminary findings. These seminars also provide an excellent means of testing preliminary findings. It is often useful to add three additional questions to these group discussions.

1. What have we heard different people saying -- students? teachers? administrators? parents? What are the differences across roles? What are the similarities?

This type of question is useful for going back to the answers to the questions about strengths, weaknesses, and recommendations to check the emphasis and insert contradictory ideas that need to be verified.

The last two questions are more technical in nature.

2. What facts about the program have emerged (e.g., start date, timelines, number of people involved)? Which need to be double checked for accuracy? What additional facts do we need?

This type of question is useful for developing a "fact sheet" which is added to and revised each day on site. This technique helps avoid the problem of discovering that vital pieces of information are missing after you leave the site.

3. What strong impressions have you had about specific people or events (e.g., someone is incompetent, personality conflict, director has a hidden agenda for the evaluation)? Which impressions need to be double checked? How do they influence our evaluation?

This type of question is useful for again revising the issues in the first three questions and for developing action steps to work around difficult situations.

Begin analysis on site. Daily issue analysis seminars add focus to the next days work. The issues will continue to reconfigure during the first few days but at some point they will solidify. This allows the team to begin to organize notes around these issues so that a major portion of the analysis occurs on site.

An issue oriented report outline helps focus the evaluation. It minimizes the problem of rambling reports with unclear findings by forcing the evaluators to organize their thoughts around the major findings. The report outline should be prepared on site during the last issue analysis seminar. This type of outline makes it much easier to divide writing assignments among the various team members. It is also quite useful for preparing an executive summary of the findings, an essential ingredient for any evaluation report.

Give an oral debriefing to key respondents at the end of the visit. An issue oriented report outline provides an excellent vehicle for sharing preliminary findings with key respondents while you are on site. A debriefing allows evaluators to test the validity of the findings. It is also a good means for checking the feasibility and usefulness of recommendations so these can be tempered in the written report.

An oral debriefing is especially useful if there are highly negative findings to report. It is sometimes appropriate to "give them hell" in the oral debriefing and use greater diplomacy in the written report. I have found that individuals are more receptive to negative feedback in person than in writing.

At times, the evaluators should also give personal debriefings in private on sensitive issues. This is typically information that will not go in the written report but would be useful feedback to a specific person. An example of personal feedback would be explaining to a program director how their perceptions are markedly different from their staff's. Oral debriefings occur at a point in time when the interest in the evaluations is the keenest and provide a sense of closure to the evaluation.

Strategically use direct quotes. Patton 1980 discusses the value of using direct quotes. Direct quotes are especially useful for portraying subtle and contradictory findings. Consider these quotes from the evaluation of performance-based teacher education. "I'm a very busy person and I like the PBTE materials because they are 95 percent self-contained. They're all meat and not fat" as compared to "The materials are too skinny - I needed more information." The evaluator must come to grips with these contradictory perceptions in the report. Many times the nuances of a situation can be best expressed through direct quotes. Using quotes from several individuals allows shades of meaning to emerge. Direct quotes also help assure the validity of information presented. They force the evaluator to consider the exact wording of a respondent when synthesizing key findings. Quotes often provide a depth of information that triggers several key findings. Consider the shades

of meaning evident in the following quote from a university dean about the performance based program.

> "Our program could not exist without the modules (reliance on modules to deliver instruction). The materials have been proven (systematic R&D process used to develop materials). When you get through them you can do what they've taken you through (competency based approach). I's a more accountable way of operating (accountability from an administrators perspective)."

This administrator offered his perspective on four different effects in one quote.

Use triangulation and multimethod approaches. How can we be sure that an "earthy" "undeniable" "serendipitous" finding is not in fact, wrong? Triangulation, the process for checking the veracity of findings through multiple data sources or methods, is a valuable tool for testing findings. In addition to the commonly used practices of checking for consistency within an interview and across respondents, I've found two types of triangulation to be most useful.

For me, the least costly and most effective type of triangulation is multiple observers. Since each member of an evaluation team typically touch the elephant at a slightly different place and come away with unique reactions, the mental pictures formed by several people can be shared and comingled. This type of triangulation is very flexible, it can be done at a macro level to share the total gestalt of a program or at a micro level to check on specific facts, inconsistencies, and nuances.

The second most useful type of triangulation is using multiple methods. Jick 1979 presents some interesting ideas for mixing qualitative and quantitative methods. For example, in the study of performance based teacher education, a list of twenty key findings from the case study sites was developed. This list was shared with directors of seventy additional performance based programs. They were asked to rate the extent to which each of the effects had increased, stayed the same, or decreased in their setting. This quantitative technique had some utility for checking the generalizability of the case study findings. In the evaluation of the maternal health and child care program, both quantitative and qualitative data were collected. We had data from pre-post "Three Day Food Record" and "Food Frequency Record" as well as asking clients how food they eat had changed since starting the program. These two data sources were used to check veracity. In many cases we found the qualitative data to be more accurate because of problems in collecting the pre-post data (e.g., the posttesting often occurred after a woman was no longer pregnant and had gone back to her old diet).

Report qualitative findings thoroughly. The write-up of qualitative findings can influence their veracity. In qualitative reports, it is useful to continue to remind the reader of the methodology used throughout the report, not just in the methods section. This can be accomplished through inserting phrases such as "In interviews with fifteen program administrators, we found that..." and identifying the person who's talking such as "the director of the program explained the relationship as follows..." As mentioned earlier, inconsistencies should be reported. It's also valuable to distinguish between opinion/feeling data and behavioral/knowledge data in the write-up.

Work with decision makers to accept qualitative findings. Probably the greatest drawback to using qualitative methods is they are viewed as lacking credibility. Many of the techniques described above are useful for enhancing the validity of findings, but they do not deal with the deeply entrenched perception that the findings are subjective, biased, and not scientific. The easiest resolution to this problem is to seek out decision makers who are attracted to the type of insights that results from qualitative studies. I've found this solution to be the most effective for facilitating acceptance and use of qualitative findings.

For more skeptical decision makers, I've found two techniques to be somewhat effective -- merging qualitative and quantitative data and training overtime. The combination of numerical and descriptive data can answer both the "how many" and "what does it mean" questions. Empirically oriented decision makers are typically more receptive to the deeper questions once numerical benchmarks have been established.

I've found many highly intelligent decision makers with misconceptions about and fears of qualitative approaches. Training is an essential ingredient of any qualitative study and should be continuous. The most effective times to train decision makers are when the study is being designed and when findings are being orally presented. I've found it's also useful to conduct brownbaggers, share short articles, and initiate casual discussions on qualitative methods. As with any innovation, qualitative methods require repeated exposure over time through different mediums to lead to acceptance.

Summary

Wrongness will occur in qualitative approaches but it will also occur in quantitative approaches. Given the methodological weaknesses present in almost every quantitative study of educational programs, I would predict there are more wrong findings emerging from quantitative studies. In a sense, wrongness may be easier to control in a qualitative study since the evaluator has fuller information about the condition under which data has been collected. However, I think

a more important issue than rigor of the findings is that qualitative approaches produce a different kind of findings -- insights into and understanding of complex situations.

As we continue to strengthen the methodology for conducting qualitative evaluation studies, their immense value to the field of evaluation will be realized. I advocate more systematic methods for intuitive analysis. There is something special and fragile about the types of insights, reflections, and hunches that emerge from qualitative studies. We need to build analysis procedures that help these impressions emerge and take shape rather than beating them back into oblivion. If rigor can be welded into the intuitive analysis process, I think we will have a keen edged feather for probing ever deepening issues in future evaluation studies.

Adams, Kay A. and Patton, Michael Q. Does Performance-Based Teacher Education Work? Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, January 1981.

Adams, Kay A.; Patton, Michael Q.; and Terranella, Patti A. The Effects of the Coordinated Consumer Health Education Project on Improving Maternal and Infant Care Practices in Appalachia. Hazard, Kentucky: ALCOR, January 1981.

Adams, Kay A.; Halasz-Salster, Ida; and Bragg, Debra. Evaluating an Effort to Help Children Cope with Parental Separation and Divorce. North Elementary School: Newark, Ohio, March 1981.

Jick, T.D. Mixing Qualitative and Quantitative Methods: Triangulation in Action. Administrative Science Quarterly 24:4,7, 1980.

Miles, Matthew. "Qualitative Data as an Attractive Nuisances: The Problem of Analysis" Administrative Science Quarterly, December 1979, 24:590-601.

Patton, Michael Quinn. Qualitative Evaluation Methods. Beverly Hills, California: Sage Publications, 1980.

Spirer, Janet. The Case Study Method: Guidelines, Practices and Applications for Vocational Education. Columbus, Ohio: The National Center for Research in Vocational Education, The Ohio State University, 1980.